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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,805	10/19/2001	Henry Colombo	CSA-101-B	9375

7590 10/23/2003

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EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,805

Applicant(s)

COLOMBO ET AL.

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each pipe end having an inside chamfer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular each pipe end having an inside chamfer formed therein is not described in the disclosure of the instant application.

Further, claim 25 recites, "a pair of thin wall metallic pipes having smooth interior and exterior surfaces"; therefore, it is not possible for a chamfer to be formed on an inside of each pipe end.

Claim Rejections - 35 USC § 103

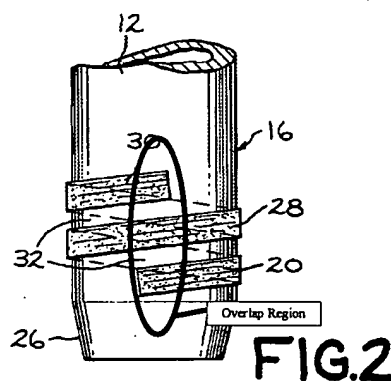
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 3343252, Reesor in view of US patent 3937641, Kusher et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data.

In regards to claim 12, Reesor discloses a sealer joint comprising a pair of thin wall metallic pipes (21, 22) having smooth interior and exterior surfaces and end portions, each end portion having a squared cut end and a rounded cross-sectional configuration, a pair of the pipe ends positioned in a parallel and an end to end relationship to each other; and a clamp (23) over an adhesive.

Reesor does not disclose a double-sided tape applied only around the exterior surfaces of the pair of the pipe ends, wherein the double-sided tape has a first end and a second end and the second end forms and overlap of the first end around the pair of the pipe ends. Kushner et al teaches a double-sided tape (28) applied only around the exterior surface a pipe end (16), wherein the double-sided tape has a first end and a second end and the second end forms and overlap (see Figure 2 below) of the first end



around the pipe end, so as to have "a greater resistance to sheer force than the usual adhesive customarily used in joints that is applied in a liquid state" (col. 2, lines 29-33). As Kushner et al relates to a joint for adhesively connecting tube members, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a double-sided tape applied only around the exterior surface a pipe end, wherein the double-sided tape has a first end and a second end and the second end forms and overlap of the first end around the pipe end, so as to have a greater resistance to sheer force than the usual adhesive customarily used in joints that is applied in a liquid state, as taught by Kusher et al.

Ressor does not disclose a double-sided adhesive, closed-cell acrylic foam tape. 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses a double-sided adhesive, closed-cell acrylic foam tape (4951). As 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data relates to high performance adhesives, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a double-sided adhesive, closed-cell acrylic foam tape, since it has been held to be within the general

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skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regards to claim 13, Ressor in view of Kushner and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses the coupling having means for clamping (the crimp) the coupling and wherein the means for clamping being positioned of the double-sided adhesive, closed-cell acrylic foam tape.

In regards to claim 14, Ressor in view of Kushner and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses the pair of pipe ends being butted as close together as possible.

In regards to claim 25, Reesor in view Kuser et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses a sealed joint comprising:

a pair of thin wall metallic pipes having smooth interior and exterior surfaces, each pipe having an end positioned in a parallel and an end-to-end relationship to each other;

a double-sided adhesive, closed-cell acrylic foam tape having a normal tensile strength of at least 80 - 1101bs./in² to aluminum at room temperature, wherein the double-sided adhesive, closed-cell acrylic foam tape is wrapped around only the exterior surfaces of the pipe ends for providing a leakproof joint and a smooth interior surface at the joint;

and a coupling clamped over the double-sided adhesive, closed-cell acrylic foam tape.

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In regards to claim 26, Reesor in view of Kusher et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses the double-sided adhesive, closed-cell acrylic foam tape being precut so that a second end of the precut tape overlaps a first end of the precut tape around the pipe ends forming an overlap approximately 3/16" - 1/4" long and the coupling having a clamping means positioned over the overlap.

Note, a comparison of the recited process with the prior art processes does NOT serve to resolve the issue concerning patentability of the product. In re Fessman, 489 F2d 742, 180 U.S.P.Q. 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which it is made is patentable. In re Klug, 333 F2d 905, 142 U.S.P.Q. 161 (CCPA 1964). In an ex parte case, product-by-process claims are not construed as being limited to the product formed by the specific process recited. In re Hirao et al., 535 F2d 67, 190 U.S.P.Q. 15, see footnote 3 (CCPA 1976). Therefore, the double-sided adhesive, closed-cell acrylic foam tape being precut so that a second end of the precut tape overlaps a first end of the precut tape around the pipe ends forming an overlap approximately 3/16" - 1/4" long is given little patentable weight.

In regards to claim 27, Reesor in view of Kusher et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses the double-sided adhesive, closed-cell acrylic foam tape further providing a static sheer of at least 1000 grams at 72° and 500 grams at 150°F, has a peel adhesion rating for stainless steel at room temperature of at least 181bs./in.

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In regards to claim 29, Reesor in view of Kusher et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses the double-sided adhesive, closed cell acrylic foam tape able to be applied to the pair of pipe ends at a temperature as low as 32°F.

In regards to claim 30, Reesor in view of Kusher et al and 3M VMB™ Double Coated Acrylic Foam Tapes and Adhesive Transfer Tapes Technical Data discloses a sealed joint comprising:

a pair of metallic pipes having smooth interior and exterior surfaces, the pair of metallic pipes each having a chamfered end abutted in an end-to-end relationship to each other;

a double-sided adhesive, closed-cell acrylic foam tape applied only around the exterior surfaces of the abutted chamfered ends; and

a coupling clamped over the acrylic foam tape, wherein the double-sided adhesive, closed-cell acrylic foam tape having the following properties: a peel adhesion rating of at least 181bs/in² at room temperature for stainless steel, a normal tensile strength to aluminum at room temperature of at least 501bs./in², a static sheer of at least 1000 grams at 72°F and of at least 500 grams at 150°F, a dynamic sheer of 40 lbs./in², a static sheer of 250 grams for 10,000 minutes and a temperature tolerance of at least 160°F.

Response to Amendment

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The declaration under 37 CFR 1.132 filed 6/24/03 is sufficient to overcome the rejection of claims 12-14 based upon Kanao '380.

Response to Arguments

Applicant's arguments with respect to claims 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd

Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670